

SYSTEMS AND METHODS FOR ENHANCING SECURITY OF COMMUNICATION OVER A PUBLIC NETWORK

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ABSTRACT OF THE DISCLOSURE

An authentication protocol is disclosed for use in enhancing the security of communications between software applications and Internet-based service providers. The protocol incorporates a two
10 level authentication model based on a distribution of authentication responsibilities, wherein the application authenticates users and the service provider authenticates the application. Embodiments of the protocol incorporate public key infrastructure
15 and digital certificate technology. Other embodiments of the present invention pertain to applying a corresponding protocol to peer-to-peer communication scenarios.

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